THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 139. PHILADELPHIA, JUNE 18, 1859. NEW SERIES, VOL. II. NO. 12.

Original Communications.

ANATOMY

IN ITS

RELATIONS TO MEDICINE

AND

SURGERY.

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No. 6.

CRANIAL REGION (continued).—The ceruminous glands, so far as observation extends, present in structure no visible difference from the sweat glands. They are seen of different sizes, and the cerumen or wax as we observe it in the ear is probably not the product of any special gland, but the mixed products of all within the cartilage, consisting in composition of fat, albumen, water, brown pigment granules, a yellow bitter principle, and salts. Most of it is acted upon by alcohol and ether, which would suggest their use in part as a solvent for the removal of ceruminous accumulations. The oleaginous part serves to moisten and protect the surface of the tube, and the peculiar odor arising from the ear wax no doubt proves defensive against the entrance of insects. The proper amount of this secretion becomes a subject of some moment in determining the normal condition of the canal.

When the glands are in a healthy degree of activity and the ear is inspected, the cartilaginous part of the tube will be seen beset with short soft hairs, covered with fleecy particles like hoar frost, of a slightly brownish hue, and of the consistence of treacle. As the whole interior circumference presents this appearance it is termed the *ceruminous* circle. Accumulations therefore of the secretion in masses is neither natural nor conducive to the welfare of the organ; nor does an abundant formation of liquid cerumen indicate a proper exercise of function. The appearance of the wax when such is the case will be puriform; it will be found accompanied with increased vascularity of the canal, and may be produced by artificial irritation as in picking the ear. If therefore the lining membrane be in a healthy condition, its color must be a dull or greyish white; and the cerumen must not be scattered about in masses.

Accumulation of Cerumen.—This may collect in large quantities, intermixed with dirt and epithelial scales forming a dense plug which shall so close up the auditory passage as to prevent sonorous rays from reaching the drum, or by pressure on it produce inflammation and pain. Persons who travel much in public conveyances, become often affected with deafness from this cause.

Patients with such accumulations will say that in gaping, eating, or pressure on the cartilage, something will crack in the ear, and for a time their hearing is improved; this follows from a sudden displacement of particles of the wax either from the drum or some part of the tube admitting the entrance of sonorous undulations. The habit of introducing lint or cotton into the canal is bad, as it tends to produce these collections. When the sensibility of the membrane is such as to make the impression of cold air injurious it should be applied only to the concha.

The extreme delicacy of the lining of the canal will show the impropriety of pulling

forcibly away these collections, and the propriety of detaching and washing them out by a continued stream of water.

Arrest of Ceruminous Secretion.—When the glands become inactive, the interior will present on inspection a dry appearance with the epithelial scales adhering at points. The ceruminous glands often become inflamed, followed by the formation of abscesses. Operations on this canal occasionally excite sneezing by the relation which subsists between the auricular and nasal branches of the 5th pair of nerves, or coughing by the communications between the auricular part of the 5th and pneumogastric nerves. The giddiness, vertigo, and even fainting which occur from the same cause follows probably from the cerebral impressions received and communicated through all the sensitive nerves of the canal.

Abscess of the deeper part of the concha may produce paralysis of the muscles of the face, from the swelling pressing down upon the facial nerve, decayed or aching teeth, often excite pain in the ear, both being supplied from the same pair of nerves. The inflammatory discharges which occasionally take place in children during dentition, are to be explained by the same sympathetic bond.

Discharges of blood from the external ear attends fractures at the base of the brain, but the anatomy of the part as presented, exhibiting a great delicacy of vascular support, is sufficient to account for the flow of blood which succeeds other causes, as concussion, apoplexy, strangulation, or direct injury. The bleeding in these cases while it is not very profuse often continues a long time, as the subcutaneous tissue being very scanty, and the vessels so near the surface there is no chance for such retraction as will be favorable to the formation of a clot.

For the occular exploration of the auditory canal, the observations already made in regard to direction must not be overlooked. In addition to a good sunlight the cartilage must be drawn upwards, outwards, and backwards, in order to straighten as much as possible the natural curves of the tube. In the removal of foreign bodies from the organ, instruments should be carried along the lower wall, inasmuch as it is the longer, which taken in connection with the fact that the vertical diameter of the tube is the greatest will admit them to pass beyond the obstacle, providing such should be round in its form.

In syringing the ear, the stream should be passed along the upper wall, as it will be received upon the tympanic membrane at an angle so nearly parallel to its oblique direction, as will not only defend it against an undue impetus of the fluid, but deflect the stream back along the inferior wall. Appropriate to this subject is that of protecting the person from the liquid employed as it escapes from the external orifice. If the auricle be examined, a notch will be seen between the tragus and antitragus, and if a cup be placed firmly up under the lobe of the ear, this notch will conduct every drop into it without soiling the clothes in the least.

In the use of the aural speculum, it will be also evident that its dilating power should be exerted only on the cartalaginous part of the tube, all in advance being surrounded by bony walls, and therefore immoveable. Various malformations of the meatus are occasionally met with, such as in depth, curves, diameters, etc.

Auricle. One of its most common affections is eczema, especially among children ; a favorite spot for which is on the posterior part of the organ. As it appears in childhood as a consequence of dental irritation or gastric disorder, we may invoke, by way of explanation, the communication between the auricular and maxillary branches of the 5th pair, and the auricular filaments from the pneumogastric of the 8th pair of nerves. The existence of such eruptions at first, is almost always significant of constitutional disturbance, which fact should suggest constitutional treatment. An eruption very similar to the above, appears at the auriculo-mastoid angle, in infants, but is simply an excoriation due to friction, or inattention to cleanliness.

Specific ulceration of the auricle is seen as an epithelioma or accompanying constitutional syphilis. It is said never to be the seat of

furuncle. Aneurism by anastomosis is frequently situated on this part of the ear. Mr. Colles, in a case of this kind, tied the posterior auricular artery.

Alterations in form.—This may follow from the mode of wearing the hair over the auricles, practiced by many females, thus compressing and flattening them out. This accommodation to the behests of fashion exerts no small influence in preventing sonorous rays reaching the tympanic membrane, though probably they hear enough, with all these mechanical obstacles. Long neglected eruptions of the organ will alter its form by the subcutaneous deposit of lymph, sometimes obliterating the natural sinuosities of the cartilage. There are several congenital defects which we may merely mention, such as entire absence, or separation into parts; out of its functional position; absence of certain parts, etc. To the embryologist these anomalies become interesting subjects for interpretation.

Wounds.—As the blood vessels which supply the auricle are small, wounds of its substance bleed very sparingly. When it becomes necessary to stitch such, the sutures should not extend beneath the skin. Unless the silver wire be employed, when this precaution becomes a matter of no importance, as I have had opportunity to verify.

These organs suffer from frost bite, because of their exposed situation, the great delicacy of the skin, comparative absence of adipose tissue, and being at the remote bounds of the circulation. The last reason explains that diminution of temperature which warns the physician, in cases of illness, of the failing condition of the central organ of the circulation.

It was at one time asserted by naturalists that the removal of the auricle produced barrenness, and on the strength of this, legislation was invoked to crop criminals, in order to prevent their inflicting a vicious offspring on society.

Membrana Tympani.—This is a kind of diaphragm, separating the external ear from the cavity of the tympanum, or middle ear. Allusion has been already made to its position being oblique from above downwards and inwards, (See fig. 13.) It is oval in shape, its greatest diameter being only about two-fifths of an inch in extent. It is readily seen, in a good light, if the cartilage is properly manipulated, and is quite white in color, much more so than the other parts of the auditory canal, looking somewhat like a small disc of silver coin. Its circumference is inserted into a dense fibrous ring in the tympanic sulcus of the petrous part of the temporal bone, derived from the periostea of the bony meatus, and the tympanum, and consists of three layers; the intermediate and proper lamina being white fibrous tissue, with the fasciculi radiating from the centre to the circumference, and containing some elastic filaments partially developed; the external lamina consists of a modified skin continued from the auditory canal, and the internal of a mucous layer, continued up from the pharynx through the Eustachian tube, and surmounted by cilliated epithelia.

Viewed with an appropriate light, a line of higher color is seen to run across it, nearer the upper than the lower part; this is made by the manubrium of the malleus, and might be mistaken for some change in the structure of the organ.

Blood Vessels.—The arteries which supply the membrane of the tympanum come from the *tympanic branch* of the internal maxillary, reaching the drum through the Glasserian fissure, the main trunk of which follows the course of the manubrium of the malleus. Others come from the internal carotid, and the auricular trunk of the external carotid.

Nerves.—On the external or cutaneous surface twigs from the auriculo-temporal branches of the 5th pair reach the membrane, entering the meatus between the cartilage and the bony meatus. The chorda tympani nerve passes across the inner surface of the fibrous layer of the drum over the handle of the malleus before reaching the little aperture on the inner side of the Glasserian fissure. The remaining nerves will be described with the tympanum.

Cavity of the Tympanum.—On the inside of the drum is a small space called the *cavity of the tympanum*, or the middle ear. Com-

municating with this space (something over one-fourth of an inch in diameter) is the Eustachian tube, leading from the pharynx, and the mastoid cells, numerous small chambers, which make up the whole interior of the mastoid portion of the temporal bone. This space is spanned by a chain of four small bones, *malleus, incus, stapes,* and *orbiculare.* They form a communication across the tympanum, between the drum and the internal ear or labyrinth, the handle of the malleus being fixed on the one hand into the membrana tympani, and the stapes on the other into the fenestra ovalis of the cochlea. These bones are united by ligaments, and moved by appropriate muscles, which either make tense or relax the membrana tympani, and will conduct the vibrations of the drum across the tympanic space to the inner ear.

Fig. 15

Fig. 15 exhibits the cartilage of the ear, its concha leading into the external auditory canal, at the bottom of which is the membrana tympani; below the canal is seen the mastoid cells; and prolonged from this part of the bone the styloid process, behind which the facial nerve emerges from the stylo mastoid foramen. Beyond the membrana tympani is the cavity of the tympanum leading down into the Eustachian tube, and stretching across it the chain of small bones. The dark, crescent-shaped spot opens into the mastoid cells. Beyond the tympanum the cochlea, and above it, the three semi-circular canals.

The mucous membrane of the pharynx is continued up through the Eustachian tube into the tympanum over the drum, and from thence into the mastoid cells, all of which it lines. In these cells its vascularity is diminished, and is also destitute of follicular glands.

Blood Vessels.—These originate from the internal maxillary, (*tympanic artery,*) the posterior auricular, (*stylo-mastoid branch,*) with many communicating branches from the internal carotid, pharyngeal, descending palatine, and even *meningeal twigs* from the dura mater.

Nerves.—On the walls of the tympanum a plexus is distributed, formed by a branch from the glosso-pharyngeal, (nerve of Jacobson,) others from the greater and lesser superficial petrosal nerves, and from the carotid plexus of the sympathetic.

Practical Observations.—The drum of the ear being situated at the bottom of the auditory canal, the suffering from its affections will be indicated by a feeling of deep-seated pain. The pain within the orbit, teeth, temple, etc., accompanying its inflammations, is explained through the communications existing between the different parts of the 5th pair of nerves.

Perforation of the drum may follow a blow on the head, or by ulceration a polypus may in this way commence on the tympanic side and pass through it into the external meatus. The discharge of heavy ordinance is a common cause of its rupture. Cases from this cause were very numerous during the late Russian war. Those having charge of artillery suffer from hemorrhage, the source of which is the small blood vessels of the auditory canal ruptured by the atmospheric concussion. Previous to the storming of Sweaborg, the gunners were directed to stop their ears with cotton to prevent injury to the organ of hearing. As this membrane alone separates the tympanum from the external auditory tube, it will be readily understood how the air, when the drum is perforated, may pass from the throat out through the external meatus. Hence the test adopted by surgeons to determine the integrity of the drum, by bidding the patient to close his nose and mouth and force the air from the pharynx.

As the handle of the malleus and the chorda tympani nerve cross the membrana tympani, its destruction by disease will involve them in

different ways. Their connection with that membrane suggests the propriety of puncturing it, when such an operation is demanded, at the lower part, in order not to injure either. When large portions of the drum are destroyed, an artificial one may be employed. To be useful, that portion of the natural one, with the malleus attached, should remain, otherwise the principal conducting medium of vibrations is wanting.

A sore throat is often attended with obtuse hearing from the inflammation extending along the Eustachian tube and blocking it up either with secretions or vascular engorgement, thus excluding the entrance of air into the tympanum. The propriety of examining the fauces and pharynx in all cases of diminished hearing, will be obvious.

As the throat, tympanum and mastoid cells are continuous, disease may be propagated throughout the whole. Thus we have the explanation of the disastrous consequences of scarlet fever to the organ of hearing, by establishing suppuration and caries.

The auditory ossicula are connected by ligaments. These fibrous structures, like fibrous tissue elsewhere, may become the seat of rheumatic or gouty disease, producing a variety of deafness, which, when recognized, is often amenable to constitutional agents.

These bones are moved by muscles, and may therefore become paralyzed by injury to the facial nerve, which supplies them in part. A certain amount of deafness is noticed from this fact in some cases of facial paralysis.

A vascular bond exists between the tympanum and the dura mater, hence the membranes of the brain and the brain itself may become involved, by extension of disease from the ear.

Internal Ear.—This portion of the organ of hearing is not unaptly termed the *labyrinth*. It is situated in the petrous part of the temporal bone, and consists of an external and internal part, the former composed of bone, the latter membranous. Within and without the membranous labyrinth is a fluid, the *endolymph* and *perilymph*, floating in which are little bodies composed of lime, (*otolithes.*) The labyrinth is divided into three parts: the *cochlea*, a snail-shaped structure; the *vestibule*, and three *semi-circular canals*, (see Fig. 15.) In the interior is distributed the auditory nerve upon a central spiral axis, (*lamina spiralis.*) This part of the auditory apparatus is the essential portion of the organ, all else being but mechanical arrangements for conduction. The fundamental nature of the internal ear is still more strongly established when examined by the philosophic light of comparative anatomy.

The auditory capsules of polyps are probably the simplest efforts of nature in the formation of the vestibular part of the labyrinth. As we ascend the scale, the semi-circular canals are added; a little higher, and the cochlea appears, when we have the entire labyrinth. The internal ear is supplied with blood from the *internal auditory*, a branch of the basilar, and the *stylo-mastoid* from the auricular branch of the external carotid.

Practical Observations.—Diseases involving this part of the organ are confessedly obscure, and as yet pathology has not spoken authoritatively on this subject. As it is the citadel of the auditory nerve, its diseases will be likely to be followed by nervous deafness. Sometimes this condition is congenital, and where so the subject is likewise dumb. Sometimes it is the consequence of changes accompanying age, (*senile deafness,*) etc.

The auditory nerve is not very dissimilarly situated from the spinal axis. Both are placed in canals of bone and membrane, both are surrounded by fluids, both supplied by blood vessels, in part from the same source. Proceeding on such data, we might inferentially anticipate the lesions of the organ would be inflammatory states of the surrounding walls; in other words, a meningitis, with or without effusions, apoplexy from effusions of blood, or disease of the nerve itself.

The inosculation between the branches of the internal auditory; and the stylo-mastoid arteries should not be overlooked, as leeches or counter irritants applied between the lower jaw and the mastoid process of the temporal bone would come so near the latter vessel that

the depletion from the internal ear would be direct.

It will be evident, from the previous remarks, that deafness must depend upon causes acting either upon the conducting apparatus of audition, or on the special nerve or the percipient and presiding part of the brain. The first is in a great measure accessible to the appliances of surgery; the last two must be reached through the general system. To determine in cases of deafness whether the difficulty is with the auditory or special nerve, a watch is placed between the teeth or on the side of the temple. The propriety and tolerable conclusiveness of the practice will be admitted when it is considered that though the sounds may not reach the nerve by the natural route in consequence of disease, they may, if the nerve is sound, be transmitted through the cranial walls. Appropriate to this subject of nervous deafness may be mentioned that arising from a proper condition of the general sensibility of the organ. Persons are met with who can hear best in an omnibus, or any situation where there is considerable noise. The explanation is found in the dependence of the motor nerves supplying the muscles of the ossicula for their vigorous action, upon the perfection and intensity with which the presiding centres are impressed by their sensitive connections.

In estimating the nature of dullness of hearing, personal peculiarities should not be overlooked. It must not be forgotten that it is the mind that hears, and hence, either through inattention or abstraction, sounds may not be recognized—"having ears they hear not."

Rhinoplastic Operation.

By A. G. Walter, M. D.,

Of Pittsburgh, Pa.

James Hagan, a laborer, aged 31 years, was on the 24th of January, 1859, admitted into my hospital, the point of his nose having been bitten off during a scuffle with some of his companions. The portion bitten off was so masticated, and in the patient's opinion so unfit for replacement, that he cast it away. Bleeding profusely from the ragged stump, he presented a deplorable appearance. The whole point as far as the ossa nasi being removed, only one-eighth of an inch of the septum, near the upper lip, remaining; on the right side half the ala was lost; on the left nearly the whole including cutis and cartilage; the remaining stump presenting torn and ragged edges. Notwithstanding the lateness of the hour when the patient sought admission, it was deemed advisable to remedy the defect at once. Assisted by Dr. McGrath, the point of the nose was rebuilt by *borrowing the skin of the dorsum of the nose* over the ossa nasi. With this view an incision of about four inches in length was made under the glabella nasi and close to it, commencing from the middle of the lower ridge of the orbit on the one side, traversing along it under the inner canthus of the eye to the bridge of the nose, and under the glabella, down to the middle of the lower ridge of the orbit of the other side. This flap was dissected off downwards in its whole extent to the stump of the nose, the remaining parts of the cartilages of the ala having been left attached to the flap, and was drawn downward over the point of the nose, its middle portion being fastened by two fine silver sutures to the very small remnant of the cutaneous septum of the nose, which had previously been smoothly pared. The ragged edges of the flap thus slid down over the point of the nose were next smoothed. By this sliding downward of the cutaneous and cartilaginous remnant of the old nose, for the formation of the point, the nostrils were greatly narrowed, but no attempt was made at that time to keep them open for fear of disturbing the union, which was so much desired between the flap and the rudiments of the septum. A large wound, oval shaped, in a horizontal direction, was thus left over the dorsum of the nose, to be filled up by granulation. Cold water dressings were applied and an opiate administered. The patient bore this painful dissection with a fortitude seldom to be witnessed.

Adhesion having taken place some days after between the septum and the newly transplanted flap, and the wound under the glabella

kindly suppurating, the nostrils were gradually widened by stuffing and tubing, gently yielding to the increased power of distension. Reaction, though moderate, was accompanied by erysipelatous inflammation at the sides of the nose, which, however, soon subsided under the use of local depletion and poulticing. The wound made by the dissection had closed in four weeks, the scar over the bridge of the nose being hardly three quarters of an inch in extent.

It was interesting to observe how under the process of cicatrization the skin of the forehead and upper lip yielded to the traction of cicatrization, the former becoming a protection to the bridge of the nose, and the latter increasing the length of the septum. Six weeks after the operation, the new nose having become shaped and consolidated, and though fully satisfying the expectation of the patient, his friends still wanted that prominence at the point, which the loss of the cartilaginous septum had rendered deficient. To effect the pointing of the new nose, another operation was performed by lengthening the septum, through a strip of skin borrowed from the upper lip. For this purpose a narrow bladed knife was passed from one side of the point of the nose between the cutaneous and cartilaginous septum, and carried horizontally along to the junction of the septum with the upper lip. A piece of skin and cellular tissue of about one-fourth of an inch in breadth, was then dissected out of the middle of the upper lip down to the prolabium, and reflected upwards. This strip being in continuation with the septum of the nose, was then raised, and its point pinned into the junction of the septum with the upper lip. The wound in the lip being closed by three Carlsbad sutures. The edges of the new septum were doubled in and held in position by gentle stuffing of the nostrils. Immediate union taking place, the improvement of the nose was such as could hardly have been expected. The point of the nose, though deprived of cartilaginous support, was thus made prominent and somewhat plump, and the nostrils had regained their proper shape and potency, without any additional trimming.

The patient being pleased with the restoration, did not regret the loss of the old nose, as he considered the new one an improvement to his appearance, the old one having been rather too lengthy. The wound over the bridge of the nose having contracted to a linear cicatrix by the sliding downward of the skin of the forehead, a casual observer would almost doubt the possibility of the extent of the original wound made by the dissection.

The success of the foregoing case is due to nature's wonderful resources. A remnant of the nasal organ being used for replacing the defect, the neighboring skin, by the elasticity of its structure, afforded the material for remedying the temporary mutilation which the operation had occasioned. Without nature's accommodating power, by allowing the skin of the forehead to stretch and glide over the bridge of the nose, the scar over the nose would have been extensive, and remained a lasting memento of its former destruction.

Observations on Death by Hanging.

By CHARLES H. PORTER, M. D.,
Professor in the Albany Medical College.

Dr. Wassenbach and myself were appointed the medical commission to attend the execution of Michael O'Brien, which took place in this city June 3d, 1859.

The criminal was an Irishman, of about 50 years of age, five feet six inches in height, of full, muscular development, of phlegmatic temperament, in good health, and weighing probably 180 pounds. The day previous to his execution his pulse was found to be 80 per minute; it was the same when examined about half an hour before he was brought to the gallows. The height to which he was elevated was about four feet. There was no appearance of suffering, and no movements excepting a few slight contractions of his muscular system, scarcely observable to those who were a few feet distant. The condition of his pulse was carefully observed. The observations commenced three minutes after the criminal was suspended, and were as follows: first half minute 28, second 24, third 13, fourth 18: afterwards per minute

they were 24, 44, 40, 28, the last half minute 6, making the time during which the pulsations were perceptible nine and a half minutes. The action of the heart was examined after suspension. A faint pulsation was manifest; it disappeared at the ninth minute. It will be noticed that the pulsations were extremely irregular, rising and falling to a considerable extent. They might be represented by three waves, the height of whose phases of elevations and depression were unequal, gradually diminishing. I am not aware that this is a usual phenomenon in cases of death by hanging. A similar irregularity was observed by the attending physicians in the case of Hendrickson, executed in this city a few years since. Immediately after the contractions mentioned, and while the body was relaxing, the pulsations were stronger and fuller. Was this not probably owing less to any effect upon the heart than to relief from compression of the arteries and veins caused by the muscular contraction? The body was suspended twenty-seven minutes. The face was but slightly contorted, and only a slight frothing about the mouth was apparent. The forehead and lips, as well as the hands and nails, appeared somewhat livid. There was a deep impression around the neck; the only trace of ecchymosis was near the os hyoides. The thyroid cartilage was compressed, and partially separated from the os hyoides. The quick and painless death was caused by the separation of the first two cervical vertebræ from the remainder of the spinal column by the rupture of the intervertebral substance and ligaments.

From the penis had exuded a small portion of liquid, and a microscopic examination revealed the presence of spermatozoa. From the small number of spermatozoa apparently present, it may be a question whether the liquid was pure semen or a mixture of it with the fluids secreted by the vesiculæ seminalis and the prostate glands.

The Repertoire de Chimie says that the *Ailanthus Glandulosa*, or Japan varnish tree, yields a fixed oil, which is a powerful vermifuge.

Illustrations of Hospital Practice.

HOWARD HOSPITAL,

(LATE WESTERN CLINICAL INFIRMARY.)

Service of Dr. Turnbull.

Reported by A. A. CARRUTH, M. D.,

Resident Physician.

Opacities of the Cornea.—We present the following clinical observations on opacities of the cornea, by Dr. Turnbull, illustrated by acute cases and cases taken from the record book of the hospital.

Of the numerous cases of diseases of the eye which are seen in our hospitals and out-door clinics, there are none so apt to produce blindness as diseases of the cornea, for although it is only supplied by looped vessels from the conjunctiva, it is very liable to inflammation in feeble, scrofulous children; also, to become involved in fatty degeneration, true ulceration, or a dense form of opacity. The transparency of the cornea is liable to be altered by heat, deposits of foreign matter between each layer, or a thickening of the limpid fluid which exists between the fibrous tissue of its structure. Foreign bodies, such as cinders, particles of coal or heated metal, become firmly entangled in it and are rarely removed without injury. The cornea is apt to take on the following morbid changes: 1st. Inflammation of its structure leading to deposit of fibrine or pus, to fatty degeneration and ulceration; 2d. To destruction from chemical agents, as nitric acid, nitrate of silver, lime, etc.; 3d. To a partial or complete loss of transparency or opacity, called, in accordance with its degree, nebula albugo, or leucoma. The most prominent symptoms of scrofulous inflammation of the cornea are mistiness or dullness of vision, with pain of an intermittent character, intolerance of light, and profuse lachymation. There is a hazy condition of the cornea, with or without blood vessels running to it, or much increased vascularity. The following cases will illustrate these various forms:

Case 1st.—Thomas Agnew, æt. 8 years, applied at the Howard Hospital, April 14th, 1859, suffering with dimness of vision since an attack of measles. He suffers with intolerance of light, pain of an intermittent character over the brow, with considerable conjunctivitis, with a mixture of straight vessels running towards the cornea. In three or four places of the cornea there was a whitish opaque deposit, showing a strong tendency to advance over its surface. Pulse feeble, skin cool, strong pulsation of the jugulars (with bronchitis) appetite poor, tongue furred. The following powder was directed:

℞. Hydrag. chlor. mit.
Pulv. rhei.
Pulv. zingiber, ā ā gr. iv. M.
et. in chart, No. ij, div.

One to be taken at bed time, followed by syr. rhei. aromat., after which the following tonic was to be employed:

℞. Quiniæ sulphat., gr. viij.
Aquæ, f℥ij.
Acid sulph. arom. q. s. M.

S. A teaspoonful ter die. Tepid water as a wash to the eye, syr. ipecac. for the cough, and foot bath at bed time; also dropped into the eye a four grain solution of nitrate of silver, to relieve the catarrhal conjunctivitis.

May 17th.—Not much improved; the other eye attacked. Cod liver oil, a teaspoonful three times a day, was directed.

May 21st.—Ulcer on the inner or nasal side disappeared; the one on the outer side much diminished; inflammation of the cornea almost disappeared; cervical glands soft; altogether much improved.

May 25th.—Still improving; was discharged well.

Case 2d.—Sarah Montgomery, assistant nurse, with dark hair and eyes; third attack of scrofulous inflammation of the cornea. There existed in this case a cloudiness of one half of the cornea, with some fine blood vessels from the injected conjunctiva; also some straight vessels from the sclerotic coat. She was unable to open her eye, profuse lachrymation, nausea and vomiting, with no appetite, pulse rapid and feeble. The former attack had left a small patch of white deposit on the cornea, like a membrane, and the inflammation was entirely around this deposit. She was directed—

℞. Hydrarg. chlor. mit., gr. x.
Pulv. rhei, gr. xx.
Pulv. zingiber, gr. v. M.
Et in chart., No. iv, divid.

S. Give one powder at bed time. Also, the following wash:

℞. Extr. belladon., ʒss.
Aquæ, f℥iv. M.

S. A teaspoonful in a teacupful of tepid water, to wash the eye three times a day.

A foot bath at night, to relieve the irritation of the supra-orbital nerve, causing photophobia.

May 21st.—Able to open the eye freely; but slight injection of the conjunctiva; a few vessels over the cornea. Continue treatment, with the addition of an ointment of lard, washed with rose water, to be applied to the tarsal margins at night.

May 25th.—Not so well; more inflammation; teeth slightly coated with white deposit, the mercurial has been pushed too far. Directed the mercurial to be omitted, and substitute for it pulv. creta preparata. Also directed zinci acetat. gr. ij. to f℥j. of water, to be dropped into the eye twice a day.

May 29th.—Opacity disappearing, congestion less, no pain, no photophobia; the thin membraniform opacity is all that remains.

Case 3d.—Ellen McLaughlin, æt. 8 years and 6 months. Second attack of inflammation of the cornea, with ophthalmia tarsi and abscess of the cervical glands; unable to open either eye, and the hand kept constantly over it. The heat and profuse lachrymation, has produced a vascular eruption upon the cheek. Several spots are over the cornea, with a strong tendency to fatty degeneration. The conjunctival redness is intense; also that of the sclerotica. She looks strong and large for her age, but her muscles are soft and flabby. A large abscess in the neck was opened, and the following powder directed:

℞. Hydrag. c. cretæ, gr. x.
Quiniæ sulphat. gr. xv.
Pulv. aromat., ℈j. M.
et in chart. No. iv, divid.

S. One powder every four hours.

Also, ol. morrhuæ f℥iij. S. A teaspoonful ter die. Also to bathe the eyes with infusion of chamomile, with a small portion of alum, to be applied warm.

May 10th.—Able to open her eyes; not much increase in injection of the conjunctiva. Directed tinct. iodine over the abscess and enlarged glands; also above the brow and eyelids; also

℞. Potass. iodid.
Quiniæ sulph. āā gr. iv.
Syr. prun. Virg. f℥iss.

May 14th. There is to-day some slight improvement; the sclerotic inflammation diminishing.

May 17th. Finding the nitrate of silver not to agree with the eyes, being too stimulating, zinci acetat. gr. ij, aq. f℥j, was substituted; local application of tincture of iodine to the brow, continued.

May 25th. The eruption on the face disappearing, pulse still feeble; directed quin. sulph. gr. i., ter die.

May 28th. Still improving; continue same treatment. The cervical glands having evacuated their contents, a solution of gutta percha in chloroform was directed to be applied over the surface.

June 1st.—Face entirely well; eyes improving; a second abscess in the neck was opened; advised change of air, and continue medicine as before.

In these very troublesome cases, change of air will often be found very beneficial.

June 4th.—Patient still improving; a 4-gr. solution of nitrate of silver was applied, and continue medicine and wash as before.

June 8th.—Patient still improving; cervical

glands diminished in size; the bowels being costive, the following stimulating purgative was directed:

℞. Tinct. aloes comp.
Syr. rhei aromat. āā f ℥ij,
A teaspoonful at bed time.

Also,

℞. Quiniæ sulph. gr. xxxij,
Ferri et potass. tart. gr. xvj.
Syr. simplicis, f ℥i,
Aquæ, f ℥iij.
S. A teaspoonful every three hours.

Continue the drops as before. Basilicon ointment to the abscess.

Case 4.—Oct. 2, 1858.—Susan Scanlin, aged 7 years. Ulceration of the cornea of the left eye, with almost entire loss of vision, of 3 years duration. Right eye affected one month; effusion of pus into the anterior chamber, with opacity; epiphora; no appetite; bowels regular; tongue furred. The following was directed:

℞. Hyd. c. cretæ,
Pulv. rhei, āā gr. v.
Pulv. zingib. gr. ij M.
S. Take at night. To be followed by castor oil the following morning. No local application.

Oct. 5th.—Tongue clean; bowels having been well moved, she was directed the following tonic:

℞. Quiniæ sulph. gr. xv.
Syr. simpl. f ℥iv.
Acid sulph. aromat. q s. M.
S. Teaspoonful ter die. Also the following local application:

℞. Zinci sulph. gr. ij.
Vin. opii gtt. xx.
Aquæ, f ℥ij. M.
S. To be dropped into the eye 3 times daily.

Oct. 8th.—Improving some; opacity less; counter irritation to the left temple, with cantharidal collodion. Also, ung. hyd. precip. rub. gr. i. to lard ℥i. to the eye, with ung. zinci. carb. imp. to the nose, the schneiderian membrane being inflamed and irritated.

This treatment was continued with but slight modifications, until the 27th. The effusion of pus was removed and the ulcer cicatrized, having but a slight opacity, and the epiphora entirely disappeared. She was discharged on the 27th, but still directed to employ the local stimulant until the opacity disappeared.

Case 5.—Hannah Kennedy, aged 10 years, admitted Oct. 10th, has suffered for three weeks from effusion of lymph into the cornea, with congestion of the vessels of the conjunctiva and granular lids; pulse feeble, skin cool, appetite defective, bowels torpid, with languid circulation generally; tongue pale. She was directed a simple laxative of syr. rhei. aromat. and of castor oil a teaspoonful occasionally. Also,

℞. Quiniæ sulph. gr. ss. 3 times a day, with ferri tart. gr. j in powder, after the bowels have been moved. Also, the following ointment was directed to be applied to the lids at bed time, after being cleansed:

℞. Hyd. precip. rub. gr.i.
Axungiæ, ℥i.
M. ft. unguentum.

Oct. 17th.—Much improved in general health. Directed as a local stimulant:

℞. Zinci acetas, gr.i.
Aquæ, f ℥i.
Vin. opii, gtt. x. M.
S. To be dropped into the eye after being cleansed, night and morning. This case did not return to report the result.

Case 6.—Catharine Shay, aged 11 years, admitted October 10th, has suffered with disease of the eyes for two years. Has pain in her limbs; very costive; blue eyes; swollen lips; tongue white and furred; opacity of the cornea, the result of catarrhal ophthalmia. She was directed:

℞. Hyd. cum cretæ, gr. v.
Pulv aromat., gr. x. M.
et in ch. No. v., divid.
S. Take one three times a day.

Oct. 13th. Tongue clean; bowels more regular. Directed Ol. morrhuæ, a teaspoonful three times daily. Also, the last preceding wash, (see Case 5,) to be applied warm, with an equal quantity of water, 3 times daily, with impure carbonate of zinc ointment to the nose, on account of the discharge from it.

Oct. 17th. Discharged; much improved.

Case 7.—Oct. 31st. Harriet Vaughan, aged 20 years, has suffered for 12 years with opacity of the cornea, the result of granular lids and trichosis; has been operated upon four or five times by the removal of the cilia, etc., in Dublin, and also in this city once. Vessels traversing the surface of the cornea; great distress and pain. Directed

℞. Ol. ricini, f ℥viij.
Ol. terebinth, f ℥i.
Vini opii, gtt. xx. M.
S. Tablespoonful at night.

This case continued under treatment for some months without much benefit, various agents having been tried. She would improve for a few weeks and then relapse. This I have found to be the case with all those cases in which the cornea was covered with blood vessels, forming vascular cornea.

Case 8.—March 4th. George E. Clark, aged 25 years, suffering from dimness of vision, with a zone of pinkish vessels around the cornea, and opacity, results of cold. The iris very much contracted and of a greenish color. Directed sol. of atropia, but found that the iris did not act, therefore concluded he had iritis with the opacity. Directed the following:

R. Hyd. chlor. mit., ʒi.
Pulv. opii, gr. v. M.
et in ch. No. xx. divid.

Sig. One powder every hour.

Also, to be leeched around the brow, to relieve pain; soft ext. belladona applied around the brow at night; nothing but warm fomentations to the eye, and foot bath at night.

March 7th. Mouth affected; iris not so sluggish; pain diminished in the brow. Continued treatment.

March 10th. Much improved; iritis almost disappeared. Directed vini opii to be dropped into the eye; with good diet, and pulv. ipecac. et opii, gr. x, at bed time.

March 17th. Opacity disappearing slowly. Added zinci acetas gr. i, to aqua fʒi, to increase the stimulation. Discharged, with directions to continue treatment.

Case 9.—*Lead Solder in the Eye.*—Oct. 28th. John Helfurn, aged 21 years, a plumber by trade, while soldering a wet pipe, Oct. 25th, a piece of the fused metal (compound of lead and zinc) was thrown into the eye. Portions of it were still adhering to the cornea and eye lid, which were carefully removed. There was much congestion of the eye, while the lids were much burned on their under surface. Directed a piece of lint spread with simple cerate, also, the following wash:

R. Zinci sulph., gr. i.
Aqua rosæ, fʒi. M.

Sig. To be applied cold to the eye, with the use of two compound cathartic pills at bed time.

Oct. 31st. Much improved; lids granulating; applied probe to prevent adhesion, and 4-grain sol. of Argenti nitrat. dropped into the eye.

Nov. 2d. Discharged, well, with no injury to the eye; the tears in the eye having had the power of cooling the metal when it struck the cornea, it therefore escaped injury, while the lids were severely burned.

Case 10.—Martha Morrison, aged 25 years, admitted March 11th, suffering from deep seated and very dense opacity of the cornea, the result of lime received into the eye five years before. It is well known that pure lime, when received into the eye turns the cornea of a dead white color, and at the same time decomposes the texture, reducing it to powder, so that it can be brushed off with a camel's hair brush. As the destruction was so great as to reach the elastic tissue of the cornea, there was also adherent iris. Nothing was done but to relieve the irritation which had been set up and continued in the conjunctiva. If this case had been treated by the use of pure water, to wash the particles of lime away, and then a solution of sugar applied freely, the injury might have been more superficial, and the transparency of the cornea partially restored.

In a case mentioned by Mr. Wardrop, two-thirds of the cornea was rendered so obscure by the application of lime as to entirely destroy sight. At the end of five months the whole of the slough had separated except some small ragged portions towards the centre of the cornea. There was a slight degree of obscurity, apparently seated deep in the cornea, but the patient's sight was so much recovered, that with this eye he could distinguish large objects.

Medical Societies.

NORTHERN MEDICAL ASSOCIATION.

FRIDAY EVENING, JANUARY 28TH, 1859.

Dr. Curtis, (President,) in the Chair.

Subject for discussion: UTERINE DISPLACEMENTS.

DR. HARLOW opened the discussion by the following remarks:—Uterine pathology is in an unsettled state, as the works of the leading authors of Great Britain, on diseases of women, fully testify. Dr. Simpson, for example, lays great stress on displacements of the uterus, regarding them as the cause, in many instances, of the engorgements, hypertrophy, and induration with which that organ is so often affected. Dr. Bennet, on the other hand, attaches but little importance to displacements, as a primary difficulty, but looks upon them, in almost every case, as the result of inflammatory action; and the consequence, rather than the cause of organic changes—such as ulceration, enlargements, and increased weight of the womb. Dr. Robert Lee entirely ignores the existence of inflammatory ulceration of the neck of the uterus, except that of a specific character, such as scrofula or cancer, and ridicules the views of Dr. Bennet as visionary and unsound. Dr. Chas. West, strange to say, while he admits the great frequency of inflammation and ulceration of the cervix uteri, denies *in toto* its pathological importance. In his estimation, it is altogether a trifling matter. Dr. Tyler Smith considers *leucorrhœa* as the great malady of the uterus.

With him, functional disturbance of the glandular structure of the cervical canal of the womb is everything; the morbid secretions producing irritation and actual disease.

However conflicting these views may seem, the same discordant theories, and, of necessity, discordant practices prevail among us. Each has his favorite theory.

Dr. Harlow thought a middle course was safest and best. We should avoid extremes if we would arrive at the truth. Doubtless, it is sometimes displacement, and sometimes inflammation, which takes precedence.

Displacements of the uterus are expressed by the terms:—Prolapsus, which means a mere *descent* of the uterus from its natural position; Procidentia, where it projects externally; and Retroversion, Anteversion, and Lateroversion, where the fundus turns backward, forward, or to one side. Now, it must not be forgotten that the uterus, in its physiological condition, is a very movable organ, and does not necessarily occupy a fixed place in the pelvis. It may be elevated, depressed, or turned in various directions, without causing any unpleasant sensations and it is often found presenting itself to the external view, and yet there may be no symptoms by which the patient's attention would be called to it, except its *outward presence.* Hence, many physicians are disposed to consider displacements as of small moment. Such views are entirely too circumscribed. Granting that the womb may occasionally be changed from its natural position without any serious consequences, yet observation and experience prove that, as a general rule, displacements to any extent are attended with great suffering and derangement of health. Leaving out of the question such displacements as may not attract the attention of the patient, and consequently not require the care of the practitioner, the subject may be divided into four parts or classes.

1st. Positive displacements *without* organic disease of the womb.

2d. Positive displacements, with organic disease.

3d. *Simulative* displacements, without organic disease; and

4th. Simulative displacements, with organic disease.

The last two divisions may seem arbitrary and paradoxical. They are made for the sake of convenience, to avoid repetition and circumlocution.

The first two divisions come strictly under our notice in this discussion, but it may seem strange to classify any uterine difficulty, either real or apparent, under the head of displacements, where none exists. Dr. H. would be careful to use the word *simulative*, for although affections of the uterus may closely resemble each other in their *outward* symptoms, they are totally different in their nature, and require very dissimilar treatment. This is a point which has been too much overlooked in practice. We have been too ready to resort to the pessary whenever we have the prominent rational signs of displacement, such as trouble in standing or walking, general weakness, sensations of bearing down, pain in the back, frequent inclination to or difficulty in micturition, sympathetic irritation of the stomach and bowels, neuralgic pains in different parts of the body, etc. It is true these rational symptoms, as they are called, differ very much in different women. We have an illustration of this in pregnancy; one person may be affected with vomiting, another with great irritation of the bladder and rectum, while a third may not suffer in any way whatever.

In making out our diagnosis of uterine affections, we cannot therefore depend upon *rational* signs alone, but must resort to physical means. These are: first, touching with the finger; second, the uterine sound; and third, the speculum.

The first is the most common, and we are enabled by it easily to recognize any change in position, and to judge of any alteration in form or density. The second assists us much in cases of anteversions and other deviations, especially where there is flexion or bending of the uterus upon itself. It enables us, also, to measure the depth of the uterine cavity, thus showing whether the organ still retains its normal size and shape. The womb sound may in this respect be regarded as an elongated finger.

The use of the speculum should never be neglected when there is obscurity, and the symptoms are urgent. It brings the uterus at once into view, and is emphatically *the* method of deciding as to the presence of ulceration, or other organic changes.

Having made out a satisfactory diagnosis, and arranged the case under its appropriate head, a consistent and intelligent course of treatment is more likely to be adopted.

The *treatment* is general and special. The *object* should be to build up the general health, by proper hygienic management, as suitable clothing, pure air, gentle exercise, wholesome food, regulation of the bowels, daily ablution, and friction over the whole surface, and tonics if necessary. The amount of exercise will depend upon circumstances. A patient without organic disease should not be confined to her bed, as some recommend. Where inflammation or ulceration exists, the case is different; comparative rest would then be required. The special treatment would be, large injections of cold water into the vagina; the syringe should be large, holding at least 12 ounces, with a bent tube, perforated at the end with a number of openings. It should be used twice a day, and acts as a *douche*, giving tone to the parts, causing the relaxed walls of the

vagina to become firm and strong, relieves congestion and even ulceration of the os, and promotes the cleanliness and comfort of the patient. Astringents may be employed, though as a rule, Dr. H. prefers the simple cold water, in large quantities.

In simple displacement, without organic disease, a pessary may be employed as a mechanical support. We treat it on the principle of a fracture, which it much resembles, restoring the uterus to its place, and keeping it there until the parts around acquire tone and strength. We have many different forms of pessaries; the ring, the horse-shoe, the disc, the globe, etc. The ring is most easy of introduction and removal, and on that account is often employed. Dr. H. prefers the globe pessary; when once introduced it presents a large even surface, and the pressure is equal in every direction; it also can be borne where others would produce irritation. It can readily be removed by passing one finger into the rectum and another into the vagina. When pessaries cause pain and soreness, which they often do, they should at once be removed. The probability is that inflammation or ulceration may be present, and will be greatly aggravated by the pressure of a pessary.

The speculum will here be called for, and the appropriate local applications, such as the solid nitrate of silver will be required. The curing of the local disease will often cure the displacement. When there is no displacement, we first treat the organic disease, if any be present, and that will remove all unpleasant symptoms; and where no organic difficulty exists, nor any displacement, as often happens with *hysterical* females, we may adopt general constitutional treatment, and recommend an abdominal supporter, though in real displacements such an article would be useless.

When procidentia exists, we often have great difficulty in retaining the uterus by pessaries. They are either forced out by the womb, or cannot be borne by the patient. Dr. H. in such cases restores the uterus to its normal position, keeps the patient in a horizontal posture, and applies to the walls of the vagina, by means of a speculum with a lateral opening, a strong caustic, as potassa cum calce. The parts thus treated slough off in a couple of weeks, contraction takes place with a soft cicatrix, and thus the organ is retained. Of course, he would only employ this method after the patient had ceased to bear children.

But when we have flexion or bending of the uterus, it requires a different treatment. This is the most difficult of all forms of malformation. We must first try to overcome the organic disease, which we often have; there is also, as a rule, violent dysmenorrhœa, caused by the constriction of the canal at the point of flexion. By means of sounds and sponge tents, we may overcome the stricture, and relieve the dysmenorrhœa, though the flexion may not be perfectly removed.

Dr. Simpson, of Edinburgh, recommends in these cases the use of the intra-uterine, or stem pessary. Dr. H. has tried this in a number of cases, but has not been satisfied with the results. In most instances, it produces so much irritation and suffering that it cannot be tolerated, yet in some cases this mode of treatment is eminently successful.

Dr. Wittig employs the argenti nitratis in affections of the vagina and os uteri, and also to produce the constriction of the vagina, as mentioned by the last speaker. He occasionally introduces a sponge loaded with some astringent solution, as alum, or wine and water, or a rag saturated with Peruvian bark and wine, which causes the parietes of the vagina to contract. He gets rid of inflammation by injections of cold water, or sometimes, when he can not employ this, by warm lead water. If much irritation exists, he uses an infusion of hyoscyamus or cicuta.

Dr. Mayberry observed that the first great consideration in the successful treatment of uterine, as in other diseases, was the establishing of a *true* and clear diagnosis, and for this purpose he thought every known means of arriving at a correct conclusion ought to be brought into requisition. The next important point was in the management of the class of cases under review, the correcting of the displacement and retaining it, when corrected, in its natural position. To effect all this, which was not always easily accomplished, he pursued very much such a course of treatment as was so eloquently sketched by Dr. Harlow. He always endeavored to ascertain, if possible, whether there was any actual disease complicating the displacement. This knowledge he regards as highly essential to the proper and judicious management of each case. Chronic inflammation of the cervix, enlargement thereof, or of a part or the whole uterus, and even ulceration to a greater or less extent, especially of the os uteri, often co-exist with the several forms of displacement, as usually described in systematic treatises on the subject. Hence he adapted his treatment accordingly, and almost invariably directed his attention primarily to the complication. From whatever cause ulceration may arise, he generally expected to relieve it by means of the *argenti nitratis*, and was usually successful. This he employed by what has been appropriately termed the "*antiphlogistic touch*," *not* so as to produce a destruction of the tissue, but in such a manner as to change the character of the diseased surface. He preferred the solid stick, though occasionally he used a strong solution.

In mere *procidentia*, the simplest variety of prolapsus, he was accustomed to keep his patients in a

horizontal posture as much as the varying circumstances of each particular case will admit, and used cold water and the different astringent injections.

Of complete *prolapsus* he had not seen many instances. He had, however, recently two such cases under treatment, which he was happily successful in relieving entirely. Both were cases of long standing. One was rather remarkable, and therefore he would take the liberty of speaking of it somewhat in detail. There was complete prolapsus of the womb and of the vagina, forming a large tumor between the patient's thighs. A portion of the mucous membrane lining the vagina had already undergone a partial change, partaking more of the character of dermoid than mucous tissue. Both lips of the os, and a considerable portion of the uterus itself, were ulcerated, and the finger could easily be passed into its cavity. He did not know what had been the real cause of this state of things, as he could not get a satisfactory account of the previous history of the case. But he strongly suspected that some undue violence had been committed by instruments, or otherwise in a previous operation of some kind or other. He applied to the ulcerated parts the nitrate of silver rather freely, following it by a succession of anodyne poultices, and injections into the cavity of the womb of a diluted solution of subacetate of lead, and subsequently black wash, &c. He would have preferred, at one period in the progress of the treatment of this case, a free application of aromatic wine, but failed in procuring it at the time, it not being an officinal preparation. He had, however, no suspicion of any specific origin of the ulceration. After the swelling, infiltration of lymph, etc., consequent upon its abnormal position had measurably been removed, and the ulceration was healing kindly, the organ was replaced, and a large glass disk pessary successfully employed to retain it.

He had met with more *retroversions*, of various degrees of severity than any other form of displacement. In such cases, the pessary had not only been highly useful in his hands, but seemed absolutely required. He thought the difficulty in these cases was frequently aggravated by abdominal supporters. At any rate, he never could understand how they could possibly do any good. Of all the forms of pessaries, he decidedly preferred the horse-shoe; of materials, the gilt. He had met with instances where it was merely necessary to correct the retroversion. Such is often the case where the displacement occurs suddenly from great muscular exertion. In these *acute* cases, if the term is allowable, the uterus is usually easily replaced, and sometimes will retain its natural position without any artificial support whatever.

DR. DEMMÉ had seen at a lying-in charity, with which he was formerly connected, much uterine disease. Many cases presenting a granular appearance, quickly subsided under an astringent wash or the use of cold water injections. He considered carbonic acid gas of great value in hysteralgia, etc. Every case of dysmenorrhœa, in which it had been employed, yielded speedily.

It acts only on the mucous membrane, or the cuticle, after we get below this, its power ceases.

DR. CHAS. P. TURNER thought physicians were too much in the habit of making free applications of caustic to the os uteri. There was, in his opinion, too great a tendency to make a speculum examination, and then, on finding a slight irritation, to apply nitrate of silver, or some similar remedy. It was doubtless of great benefit in many cases, yet was by no means indicated in every instance. He had been led to make these remarks by the recollection of a case, in which there was no flow at the regular period, the patient being attacked with great fullness of the brain, and all the appearances of vicarious congestion of that organ. This would pass off in three or four days, sometimes under the action of a purgative, but usually requiring venesection. She had been treated by another physician for some time before, with caustic, for ulceration of the os, and was thought to be cured of it. On making an examination with the speculum, Dr. T. found a number of hard fibrous bands stretched transversely across the vagina, completely occluding the os. Even a small womb-sound could not be passed through, and it was found equally impossible to pass the very smallest cat-gut bougies. He then had an instrument made with a very small blade, *caché*, sliding upon a grooved staff; this, he pressed against the bands, and protruding the knife, divided them; after which he was enabled to pass in a bougie, which of course was introduced at frequent intervals for several weeks, in order to prevent a return of the adhesions. At the next monthly period she experienced no trouble, and the catamenia have since been perfectly normal. He thought it not advisable to pass the caustic far up the cervix uteri, as is so frequently practiced.

He agreed with one of the speakers, and like him did not favor the use of pessaries, although he had used them. In cases of leucorrhœa, or weakness causing prolapsus, he gave:—

℞. Zinci sulphat. ʒj.
Alum. et potas. sulph. ʒij.

Using a heaped teaspoonful of this to a half tumbler of water as an injection, night and morning, and nine out of ten were entirely relieved. He had very little confidence in abdominal supporters. In one case where there was excessive abdominal weakness, causing the womb to settle down to a

great extent, his patient was directed by another physician to employ a supporter, which proved very beneficial. Following this idea, in a similar case, Dr. T. recommended one, and no good resulted.

Dr. J. R. Bryan agreed with the other speakers concerning the difficulty of judging from the symptoms, as to whether any displacement existed. In the treatment, it is almost impossible to decide what is best to be done. With pessaries he was never satisfied, and seldom used them. In cases where we have a flat abdomen, abdominal supporters fail entirely; but where, on the contrary, the woman has a full abdomen, the supporter is more likely to be serviceable. We are generally for a long time compelled to grope in the dark, in consequence of the delicacy of the case, as very few patients like to submit to an examination. He regretted that no pathognomonic symptom existed, by which we might early detect the uterine lesion, and thus be warranted in urging a direct examination at an earlier period of our professional attendance than is now permitted by our sense of propriety.

Retroversion he had seen only in very early pregnancy, and in such instances, by placing the patient on her knees, with the shoulders well down, he never failed to restore the organ to its normal position. Astringent injections he did not regard as being always innocent or safe, as we may have the fluid going up into the womb, and thus produce inflammatory symptoms. He had seen such cases, and in one instance it occurred three times. He was much pleased that Dr. Atlee's plan of passing in a stream of cold water met with so much approval.

Dr. A. C. Bournonville wished that the members had specified more definitely the manner in which they employed the nitrate of silver. He employed it when leuchorrhœal discharges were present, in the following manner:—

℞. Argenti nitratis, gr. j.
Aq. destill. f ℥j.
ft. solut.

He had seen one case where induration occurred after its use, which required months to remove. Concerning the speculum he would prefer that known as Recamier's. It was easy of application, and not, like those with valves, apt to catch the tissues. Its reflecting surfaces also improves the facility of examination. In its application, he placed the patient on her side. Metallic pessaries he never employed, but preferred those made of india rubber, as being more easily introduced and removed, as well as less liable to produce irritation or injury.

Dr. Mayburry believed that ulceration of the os-uteri was not of so frequent occurrence as some represent. Still, he felt satisfied that it occasionally exists, and it may involve the cervix, and even the body of the uterus, as in the patient before referred to. The symptoms, however, are frequently very deceptive, and cannot alone be relied on for forming a correct opinion.

In making a speculum examination, he, as a general rule, had the patient lying on her *left side*, transversely across the bed, with her hips somewhat elevated and near the edge of the couch, with her limbs well flexed on the abdomen. He mostly used the quadri-valve speculum of Madam Boivin, and liked it better than any other. He remarked, upon the *too great modesty*, which influences medical men so often, and prevents them from knowing what is the real source of difficulty. Without a full investigation, patients may be subjected to a long course of treatment without deriving the slightest relief, and their general health may even become much jeoparded. Whereas, when a proper examination is instituted, success in many instances will be immediate.

Dr. Curtis in the early years of his practice, had used pessaries much more frequently than had been his custom lately. He believed that much might be done by position and injections, to relieve these displacements. He thought many cases were treated as prolapsus, which were inflammation of the uterus, and would be much more properly treated by leeches, and similar applications. When abdominal supporters act properly they are often of great value, but he was under the impression that they more commonly acted as *compressors*, and thus tended to increase the very difficulty which they were intended to relieve.

Adjourned.

Excision of the Knee Joint.—In an article on this subject in the *Medical Times and Gazette*, P. C. Price, Esq., says: "The operation so far as I have been able to ascertain has been adopted for the treatment of the diseased conditions of the knee joint, deformity, and accident, on 160 occasions in Great Britain, during the past eight years, dating from its first performance by Mr. Ferguson, on the 20th of July, 1850, to the end of December, 1858. Of the total number of cases 32 proved fatal, or one case in every five. By far the larger proportion of these operations were required for disease; for out of the entire number there were but six or seven for deformity, and only one for accident."

Reviews and Book Notices.

A Treatise on Baths, including Cold, Sea, Warm, Hot, Vapor, Gas, and Mud Baths; also, on Hydropathy and Pulmonary Inhalation, with a description of Bathing in Ancient and Modern Times. By John Bell, M. D., Fellow of the College of Physicians of Philadelphia, etc., etc. Second edition. pp. 658. Philadelphia: Lindsay & Blakiston, 1859.

We are glad to see a new edition of this learned philosophical and useful work. The important subject of bathing, and its influence as a therapeutical agent, is one which has been much neglected by the medical profession. One reason of this neglect may probably be found in the fact that there are so few conveveniences for the application of the various forms of baths. The public authorities of modern might well take lessons from those of ancient times on this subject. But unfortunately the care of the physical development and well being of man has given place to money making, and the most approved methods of plundering the public treasury! The medical profession should make themselves familiar with the contents of this book, and encourage its perusal by the public.

Importance of the Study of Legal Medicine. A Lecture Introductory to the course on Medical Jurisprudence, at the N. Y. Medical College. By Jas. Wynne, M. D.

In this instructive address the learned lecturer has forcibly illustrated the importance of the subject. We agree with him that it is to be hoped that the day is not far distant when the United States, profiting by the example of Europe, will so amend their codes of criminal jurisprudence, as to place these important preliminary investigations in the hands of competent and able officials, whose high character will be a guarantee for the faithful performance of their responsible duties.

Medical Journals.

The Maine Medical and Surgical Reporter has been discontinued. Since our REPORTER has been in existence, several journals have "tried its name on," but have died from the effects, which a friend at our elbow says is strongly suggestive of the fable of the frogs and the ox!

The *Medical Chronicle*, of Montreal, has succumbed to adverse influences and suspended. This is the fourth or fifth failure of attempts to sustain a medical journal in Canada, during our editorial career.

The June number—the first of the *fifteenth* volume of that sterling periodical, the *Buffalo Medical Journal*—comes to us with the title "*New York Monthly Review of Medical and Surgical Science, and Buffalo Medical Journal.*" This change is made in consequence of the removal of its editor, Dr. Austin Flint, Jr., to New York. The work is to be published simultaneously in New York and Buffalo, and made the vehicle of medical society and hospital reports, thus giving it a more practical cast. The editor hopes to retain his Western New York influence, and at the same time evoke a new interest in New York city. We trust that his hopes will be realized, but anticipate the final entire removal of the work to New York. It *may* turn out that this Buffalo has gone to New York a wooing, and that ere long we will be called on to chronicle its union with one of the already existing New York journals.

The *Medical and Literary Weekly* is the title of a new candidate for professional (and outside) support, published by Drs. Thomas & Talliaferro, in Atlanta, Ga., at $2 per annum. It is a spirited, well arranged and well conducted quarto sheet, yet we predict for it a short existence, or a speedy change to a distinctive medical or literary character. We perceive that there are certain amenities of editorial life, such as the uniform acknowledgment of sources of information, which our friends have not yet fully learned the importance of observing. Nothing is ever lost, while much is gained by being particular in this respect.

The Druggist's Review and Chemical Times, published bi-weekly, in this city, by Mr. Ivan C. Michels, and *The Druggist*, published monthly, in Cincinnati, and edited by Dr. Henry E. Foote, are devoted to the interests of the drug trade, and appear to advantage.

The publication of the *Louisville Medical Gazette* has been suspended, in consequence of the protracted illness of its editor, Dr. L. J. Frazee.

*** We have also received from the publishers new editions of the following works, which will be noticed more at length in due season:

Woman and her Diseases, by C. D. Meigs, M. D.

Elements of Medicine, by Samuel Henry Dickson, M. D., and

Chemistry for Students, by Geo. Fownes, F. R. S., edited by Robert Bridges, M. D.

We have received the following works from the publishing house of Fowler & Wells, of New York:

Hints Toward Physical Perfection, or The Philosophy of Human Beauty—showing how to acquire and retain bodily symmetry, health, and vigor, secure long life, and avoid the infirmities and deformities of age. By D. H. Jaques. 12mo., pp. 244. New York: 1859.

Rural Manuals.

The House, a new Pocket Manual of Rural Agriculture; or How to Build Dwellings, Barns, Stables, and out-dwellings of all kinds, with a chapter on Churches and School-houses. Price, post-paid, paper, 30 cents; muslin, 50 cents.

The Garden, a new Pocket Manual of Practical Horticulture, or How to Cultivate Vegetables, Fruits and Flowers; with a chapter on Ornamental Trees and Shrubs. Price, paper, 30 cents; muslin, 50 cents.

The Farm, a new Pocket Manual of Practical Agriculture; or How to Cultivate all the Field Crops; with an Essay on Farm Management, etc. Price, paper, 30 cents; muslin, 50 cents.

Domestic Animals, a new Pocket Manual of Cattle, Horse, and Sheep Husbandry; or How to Breed and Rear the various Tenants of the Barn-yard, etc., etc. Price, paper, 30 cents; muslin, 50 cents.

Transactions of Medical Societies. — 1. Transactions of the Medical Society of the State of New York; Assembly document, pp. 454. Bound in muslin.

2. Transactions of the Medical Society of New Jersey for 1859, being the 93d annual meeting of the society. pp. 95. Newark: Printed by S. C. Atkinson, No. 1 New st.

3. Transactions of the Fifth Annual Meeting of the Kentucky State Medical Society. pp. 64. 1856.

*** We purpose noticing the above Transactions at length on another occasion.

Editorial.

The Howard Hospital.—We are glad to learn that this institution has secured a spacious lot on twenty-first street, near Walnut, on which to erect their new building. The lot is 75 feet front by 180 deep. We have seen the plans of the proposed structure, which, when completed, will make it the most convenient and admirably arranged building for hospital purposes in the city.

The trustees and faculty of this hospital have much to encourage them, and in view of the admirable arrangements made for the accommodation of medical students, the Howard Hospital has very strong claims upon the support and sympathy of the citizens of Philadelphia, to whom the income, direct and indirect, accruing from the several medical institutions located here is enormous.

The same remarks are applicable to the Charity Hospital, located in another section of the city, and we hope ere long to be able to chronicle the fact that the trustees of this institution have not only "secured a lot," but that they have the prospect of speedily erecting a building upon it.

Philadelphians! these institutions have the strongest claims upon you for support, in both a benevolent and pecuniary point of view.

☞ We have been compelled to omit the Pennsylvania and other hospital reports, besides communications, editorial, periscope, etc, this week, although we had added several pages in the expectation of accommodating all.

The minutes of the State Society did not reach us in season for this week's number.

Periscope.

Hypophosphite of Quinine—A New Remedy.—Dr. J. L. Smith, Prof. of Chemistry, University of Louisville, recommends this article in those conditions in which the preparations of hypophosphorous acid are used, and where the effects of quinine are at the same time indicated. He, therefore, suggests its use as a tonic in phthisis and other cachexias. It is quite soluble in water and may be so administered, and in the form of pill, is more soluble in the stomach than the sulphate.

It was first made by adding an excess of recently precipitated quinine to a hot solution of hypophosphorous acid, and on cooling, the salt crystalizes out in beautiful silky tufts, which, when dry and broken up, resemble asbestos

in appearance. The method adopted and proposed for making it on a large scale, is by double decomposition; using the sulphate of quinine and the hypophosphite of baryta; the operation must be conducted so that there shall be no excess of either salt in the solution; the solution is filtered from the sulphate of baryta, concentrated, and allowed to crystalize, which it does in the manner already mentioned.—*Louisville Med. News.*

Compressed Sponge.—The *N. Y. Jour. of Med.* contains an important article on this subject by Dr. J. P. Batchelder, to whom is due the credit of the suggestion and general application of this valuable surgical appliance.

Our own experience with it, in a variety of applications, attests its utility.

The following method of preparing the compressed sponge and applying it in mammary abscess is given by Dr. B. "The softest pieces of sponge should be selected, each piece being large enough to cover the entire breast. The sponge should be carefully washed to remove any gravel, shells, etc., it may contain; and when thoroughly dried it is compressed for a long time under a heavy weight or between the lips of an ordinary carpenter's vice. The sponge, when thoroughly pressed, should be bound as firmly to the breast as the patient will allow, by means of a bandage passing several times around the body above and below the other breast, a piece of lint being placed between the breast and the sponge, to prevent the latter from irritating. It is then soaked with cold water, and the bandage preventing the sponge from expanding outwardly, its expansion makes the desired pressure on the breast.

The patient usually complains of pain for ten or fifteen minutes after the application. The temperature of the water dressing is soon raised to that of the body, and thus we have the essential elements of a poultice, heat and moisture, without the inconvenience of an ordinary poultice. This soft yet firm compression adapts itself evenly and equally to the whole breast, and the sponge not only forces out the matter, but absorbs it; the sponges are to be kept wet during the whole time of their application. The patient soon becomes accustomed to them, and the alleviation of suffering is so great, as to cause her to request the continuance of the treatment. The sponges should be renewed daily."

Compressed sponge in some form has been applied by Dr. Batchelder to the following uses: dilatation of the canal of the cervix uteri in cases of sterility, difficult menstruation, and for the relief of other affections of the part or organ; dilatation of sinuses; fistula in ano; dilatation of the meatus auditorius; ulcerations of nasal cavities and bones; dilatation of strictures of the rectum or urethra; hemorrhoidal tumors; dilatation of the female urethra; morbid growths of bone or soft parts; caries and necrosis; swelled testicle; syphilitic vegetations; tumors non-malignant; enlarged joints; as a styptic in hemorrhage.

Action of Santonin upon Vision.—From the French, by CH. F. J. LEHLBACH, M.D—In the Academie des Sciences, (*Gaz. Hebdom.* April 1st,) of March 21st, 1859, M. T. L. Phipson related his experience with santonin. He had taken a five grain dose of santonin a little after two o'clock in the afternoon. Between five and six o'clock its effects became manifest; he thought he perceived a very faint greenish tint upon white window curtains, but ascribed it at first to his imagination. At six o'clock the gas flame, chandeliers, the fire in the stove, and all white objects, strongly illuminated, assumed a very intense yellowish-green tinge; other objects retained their ordinary colors. This effect continued, without intermission, during the whole evening, and did not commence to diminish until half past ten o'clock, and was still appreciable at midnight and until two o'clock in the morning, when the doctor went to bed. In the morning the effect had disappeared entirely.

Attempts have been made to explain this remarkable affection of sight, by supposing the production of a temporary icterus, during which the serum of the blood becomes colored green. M. Phipson adds:

"I have been led to think that the serum of the blood is really colored by the assimilation of the santonin. I have shown that santonin is transformed, under the influence of oxydizing agents, into a new, yellowish green, brilliant and crystaline substance, which I call 'santonein,' and this substance is found in the urine of persons who have taken santonin. After the facts which I have observed, it seems to me evident that the santonin is oxydized in the body by the oxygen of respiration, and is transformed into 'santonein.'"

Medical News.

Crowding of Population in New York.—The recent report of the New York Sanitary Association presents some startling developments in regard to the density of population and miseries of the poorer classes in that city, and sufficiently accounts for the very high rate of mortality. It has explained the hitherto incomprehensible fact, that New York, though covering a much less space than Philadelphia, and having only half the number of dwelling houses, has still a greater population. It shows that there are hundreds of families living in dark cellars, and as many as twenty-five persons, in some localities, sleep nightly in an ordinary small room. The following is extracted from the report alluded to:

"There are many single blocks of dwellings containing twice the number of families residing on the whole of Fifth avenue; or more than a continuous row of dwellings similar to those on the Fifth avenue three or four miles in length. There is a multitude of these squares, any ten of which contain a larger population than the whole of the city of Hartford, which covers an area of several miles. In 1850 the entire population of this city was 515,394. Number of families, 93,608; whole number of dwellings, 37,677.

"Philadelphia in 1850 contained a population of 408,762, divided into 72,392 families. To accommodate these families there were 61,278 dwellings. With a population of 107,000 smaller than New York, Philadelphia had 23,601 more dwellings than New York.

"Baltimore, in 1850, with a population of 210,646 in 34,925 families, had 30,065 dwellings.

"Boston, in 1850, had a population of 146,881. Chelsea, a suburb of Boston, had a population of 7,236. Boston and Chelsea included had 25,415 families, and 16,567 dwellings.

"The extreme value of land in New York makes tenement houses a necessity. They have sprung up within a few years, and have now become so numerous, and the amount of capital invested in them is so enormous, and the interest paid to the owners in the shape of rent is so great, that it will be almost an impossibility to accomplish any reform. In one case, where the establishment is arranged for the accommodation of 126 families, the rates charged, if the tenements were all occupied, would not be less than 25 or 30 per cent. on the first cost, so that some five years would suffice to pay principal and interest. This building stands on a plot of ground, perhaps 50 x 250 feet. There is an alley on each side, running the whole depth, and being some 8 feet in width. Our tenement buildings are almost invariably so constructed as to make even tolerable ventilation entirely out of the question. A current of fresh air can never be passed through them after they are finished. Each tenement very generally consists of a room and bedroom. The buildings is 3 to 6 stories high, with two or more families on each floor or story. In this one room the family sit, do all their work, cook, wash and eat. Disgusting as some of these details are, the influence, both on the health and morals of the people, cannot be properly estimated in the absence of these details. I am no longer surprised at developments of wickedness in our midst, when I see how the masses live.

"The large tenement house alluded to above is occupied principally by foreigners, but not of the lowest class; most of them, with different surroundings, would make themselves appear respectable; but to look at a single fact in connection with the accommodations offered to these families where they pay a rent of 35 per cent. on the money which their tenements cost. The alley-ways at the sides of these houses are excavated to the depth of the cellars of the houses, say nine feet—an arch thrown over and covering the flag stones. Directly through the whole length of this excavation or vault is an open drain connecting with the street sewer, the water always standing, with little current. Along one side of the whole length of this vault are arranged the water closets used in common by this horde of families. They should be called stalls rather than closets, for there is not a door connected with this whole establishment; there is an opening from each division of the cellar into this vault, being lighted by openings a few feet apart, covered with iron grating, such or similar to those upon sidewalks. The filth and odor of this place are awful. And yet these are the only accommodations afforded to hundreds of women and children, amid filth such as no decent farmer would drive his swine into, and where there is but little more retiracy than upon a public common. Where there are such beastly arrangements as these, how can they develop other than a beastly morality?

"Nor need it be a wonder that more people die in New York than almost any other city on the face of the globe. Our tenements for the masses are so constructed as to shut out the light, and to make ventilation an impossibility, while the surroundings without are made to combine the very elements of death. The windows one from each room, and they have but two windows for light and air, and only one to each room; these look out against a solid brick wall, eight feet from them, and from this alley-way the odors arising from the horrid vault beneath, mingle with every inhalation these poor creatures make. Nearly all of our tenement houses are open to these very strictures, not all, I will admit, to as great an extent, yet the state of things is such as to make death a certainty to most of the poor babes whose lungs are to inhale their atmosphere. No one will wonder, who goes through these houses, only as he shall wonder that all, old and young, do not die. If this city were not more favorably located for health than almost any other city on earth, almost nobody would live here. Let the same state of things exist in New Orleans, and it would be decimated at once, and so would London. But terrible as the physical aspect is, the moral side of the picture is utterly appalling.

"What will be the moral condition of New York thirty years hence? is a question that ought to be pondered soon, if we would not be engulphed. I was in the city during the whole period of the first cholera. With a population of 220,000, the deaths ran up from about 6,000 the year previous, to more

than 10,000, notwithstanding the fact that more than one-half of the population left the city during the prevalence of the epidemic. Then the disease selected as spots where it would run riot, where there was the most crowded neighborhoods. The block in Laurens street, between Broome and Grand, was most terribly scourged. I very well remember entering one of the houses the morning the sixteenth corpse was carried out, and notwithstanding the terrible mortality there, it would bear no comparison to the present dense crowded state of our tenant houses. In 1832 there was only here and there a place which seemed so particularly to invite the disease.

"Now these plague inviting neighborhoods are everywhere. Then, the mass of the people of New York could leave for more healthy localities, now, if cholera or yellow fever gain a foothold, they must stay and die, as they could not, on account of poverty, leave. Let the cholera return here with the same virulence as at its first visit, and what could prevent the death of hundreds of thousands of people in ten weeks, which was about the time it prevailed then. Scenes I then witnessed by day and by night can hardly fade from my memory; but I candidly believe that, from the altered condition of our people in regard to their domiciliary accommodations, and from their deeper poverty being compelled to stop here, the mortality would be most horribly increased."

A floral fair and strawberry festival was held in this city last week in aid of the attempt to establish an asylum in or near this city for inebriates. Measures are on foot also for the establishment of a similar institution in Tennessee. While all such attempts have our sympathy, we are of opinion that an ounce of prevention is worth a pound of cure. Close the manufactories of bad liquors and the dram shops, and there will be little for asylums for inebriates to do.

Dr. Jacob Harson, of New York, an alumnus of the College of Physicians and Surgeons of that city, has, we learn from the *N. Y. Times*, appropriated the sum of $2,500 in stock of the U. S. Trust Company, for the purpose of providing an annual prize to be offered to the students of that college for the best report of the clinical instruction of the N. Y. Hospital. The prize will consist each year of a gold medal of the value of $50, and in addition, of a sum of from $100 to $150 in money. The competing reports are to embrace the results of the clinical instruction in the hospital during any four months in the year.

We learn from the Boston *Med. and Surg. Journal* that Dr. Edward R. Squibb, lately a passed assistant surgeon in the U. S. Navy, and Assistant Director of the Naval Laboratory at New York, has established a laboratory at 149 Furman st., Brooklyn, for the manufacture of a class of medicinal preparations that come *fully up* to the standard of the U. S. Pharmacopœia. We trust that Dr. Squibb's enterprise will be liberally sustained by the profession. His qualifications are of the highest order.

Dr. Hethby, the Medical Officer of Health for the city of London, reports that the Thames has, within the last few days, (preceding June 1,) notwithstanding the early period of the year, exhibited unmistakable symptoms of offensiveness, and more pungently than last summer.

Translation of Medical Works into the Chinese Language.—Some of the standard medical authorities have recently been translated into the Chinese language by Dr. Hobson. They include works on the following subjects: Philosophy and General Anatomy, Surgery, Diseases of Women and Children, Medicine and Materia Medica, and on General Science. Some of these works have created great interest in them and have been republished by Chinese Mandarins, and widely circulated over China and Japan. The medical works of the Chinese show them to be totally ignorant of medicine as a science. Anatomy has never been studied, and they do not comprehend the circulation nor the functions of the visceræ. It is believed that this series of treatises will spread much useful information among their practitioners, and induce attention to medical science.

The New British Pharmacopœia is being prepared by the Medical Council. At present there exist three works of the kind, under directions respectively to the Colleges of Physicians of London, Edinburgh, and Dublin, producing a confusing diversity in pharmaceutical practice. The object is now to reconcile these inconvenient discrepancies and produce a uniform national pharmacopœia.

Much temporary annoyance it is believed will be produced by the change, but the result will be satisfactory and will create a uniformity which has been much needed.

It has been decided to adopt the Avoirdupois weight instead of the Troy weight, or Apothecaries weight, and the work will be published in the English language instead of the Latin.

A fund is being raised for a monument over the remains of the late Dr. Snow, in the Brompton Cemetery, London.

Diphtheria is still prevalent and seems to be increasing in England and Wales. Every county has been more or less affected by it.

The Emperor Napoleon has decreed a statue of Humboldt to be placed in the gallery at Versailles.

The mortality from small-pox has, by the general adoption of vaccination, been reduced from its proportion of 1 in 10 of the entire mortality, to 1 in 2,378.

In Paris, England, and Genoa, the number of deaths by suicide appears to be about four per cent. of the whole deaths. And as in the *whole of France* the proportion of registered suicidal deaths equals only one per cent., it is evident that three quarters of these deaths escape official notice altogether.—*Lancet.*

The probable duration of life, at birth, was in the 16th century, at Geneva, 5 years; in the 17th century it was 11; in the commencement of the 18th century, 27; at the end of the 18th century, 32; and at the pre sent moment it is 44 years; that is to say nine times greater than in the 16th century.

The mean age of mortality was 21 at the end of the 16th century; 26 in the 17th; 34 in the 18th, and 40 in the period from 1800 to 1840, since then it has reached 41—the highest figure in the countries of Europe.—*Marc D'Espine.*

Expectation of Life.—We find the following item in the *Nashville Journal of Medicine and Surgery:*

Mr. Charles M. Willick, of London, has established an extremely easy rule for expressing the value of the property which every man, woman and child possesses in life. His formula stands thus:

$$e = \tfrac{2}{3}\,(80 - a);$$

that is, "the expectation of life is equal to two-thirds of the difference between the age of the party and 80." Thus, say a man is 20, two-thirds of the years between 20 and 80 are 40, therefore 40 is the expectation of life. A man now sixty will have an expectation of fourteen years more; a child of five will have an expectation of fifty, and so on. The results obtained by this new law correspond closely with those of Dr. Farr's English life tables, constructed from an immense mass of returns.

Professional Habits in 1670.—The great Sydenham, in the last treatise which he wrote, gives the following account of his own manner of living:

"In the morning when I rise, I drink a a dish or two of tea, and then ride in my coach till noon; when I return, I moderately refresh myself with any sort of meat of easy digestion, that I like (for moderation is necessary above all things); I drink somewhat more than a quarter of a pint of Canary wine, immediately after dinner every day, to promote the digestion of food in my stomach, and to drive the gout from my bowels. When I have dined I betake myself to my coach again, and when my business will permit, I ride into the country two or three miles for good air. A draught of small beer is to me instead of a supper, and I take another draught when I am in bed, and about to compose myself to sleep."

ANSWERS TO CORRESPONDENTS.—*Dr. L., Catonsville, Md.*—Your instruments were forwarded on the 14th, by Adams' Express.

Dr. S., Grantville, Ga.—Your instrument was forwarded by Adams & Co.'s Express, a few days ago. A glass one, of the size you wished, could not be procured.

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Trusting that you will continue your efforts to relieve your afflicted fellow creatures, I remain, very sincerely yours,

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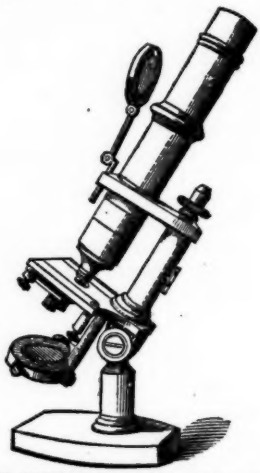

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